## 1,2-DIBROMOETHANE (EDB), 1,2-DIBROMO-3-CHLORO-PROPANE (DBCP), AND 1,2,3-TRICHLOROPROPANE (123TCP) IN WATER BY MICROEXTRACTION AND GAS CHROMOTAGRAPHY EPA 504.1 REV 1.1 1995 VELAP ID Facility Name:\_\_\_\_\_ Assessor Name: \_\_\_\_\_\_ Analyst Name: \_\_\_\_\_ Inspection Date Ν N/A **Relevant Aspect of Standards** Method **Comments** Reference Records Examined: SOP Number/ Revision/ Date \_ Analyst: Sample ID: \_\_\_\_\_ Date of Sample Preparation:\_\_\_\_\_ Date of Analysis: Was confirmatory evidence obtained for all positive results? (eg dissimilar column or another analytical 2.3 technique) Wherever sets of samples were shipped or stored, were they accompanied by a minimum of two FRB sample 8.1.1 containers? Was either 3 mg of Sodium Thiosulfate crystals or 75 µL of 40 mg/mL Sodium Thiosulfate Solution added to each 8.1.2 40-mL sample container prior to shipping? Were sampling taps flushed until temperature 8.1.3 stabilization (about 10 minutes) prior to sampling? Were samples from wells taken by first filling a widemouth containers and then the 40-mL sample 8.1.4 containers? Were samples chilled at 4°C or less after collection until 8.2.1 analysis? Were samples and FRBs stored together at 4°C or less 8.3.1 in an area free from organic solvent vapors? Were all samples extracted within 14 days of collection? 8.3.2 Were extracts analyzed within 24 hours? 8.3.2 Were LRBs and FRBs analyzed each day prior to sample 9.1.3 analysis? Were LFBs analyzed at a frequency of 10% of samples? 9.1.4 As part of an IDC, were four to seven LFB samples analyzed to have an RSD<20% and a mean 9.2.1-4 concentration between 70% and 130% of the true value? Notes/Comments:

Virginia Division of Consolidated Laboratory Services

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Relevant Aspect of Standards	Method Reference	Υ	N	N/A	Comments	
As part of an IDC, were four to seven LFBs analyzed to calculate standard deviation and mean recovery to determine MDLs?	9.2.5-6					
As part of assessing laboratory performance, were LFBs at 0.25 µg/L analyzed at a frequency of either 10% of the sample load or once per batch to be between 70% and 130%?	9.3.2					
If the 0.25 µg/L LFBs failed, were they only re-analyzed once before recalibration?	9.3.3					
Were MDL samples analyzed weekly to be above instrument background signal and between 60% and 140% of expected value?	9.4					
Were LFMs fortified to approximately 10x MDL and analyzed once every 20 samples to have ±35% recovery?	9.5					
If LFMs fell outside of ±35% recovery, were the data of associated unfortified samples flagged as suspect?	9.5					
Were second-source QCS samples analyzed at least quarterly to acceptable accuracy?	9.7					
Were at least three Calibration Standards used for a 20-fold concentration range?	10.1.1					
Were at least four Calibration Standards used for a 50-fold concentration range?	10.1.1					
Were at least five Calibration Standards used for a 100-fold concentration range?	10.1.1					
Were the concentrations of the lowest Calibration Standards near but above the MDLs?	10.1.1					
Were Calibration Standards made by fortifying 40 mL reagent water volumes?	10.1.2					
Were instrument Calibrations verified each working day by analyzing one or more Calibration Standard?	10.1.4					
Were samples allowed to come to room temperature prior to extraction?	11.1.1					
Were 40 mL sample aliquots made by removing 5 mL from sample container and applying a weight correction <b>not</b> measuring with a graduated cylinder?	11.1.2					
Notes/Comments:						

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Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Was 6 g of NaCl added to each sample aliquot?	11.2.1				
Was 2.0 mL of hexane added to each sample aliquot followed by one minute of vigorous shaking?	11.2.3				
Were 0.5 mL aliquots of hexane analyzed from each sample?	11.2.4				
Were calculations done correctly?	12.0				

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Were calculations done correctly?	12.0		
Notes/Comments:			